

# Environmental Product Declaration



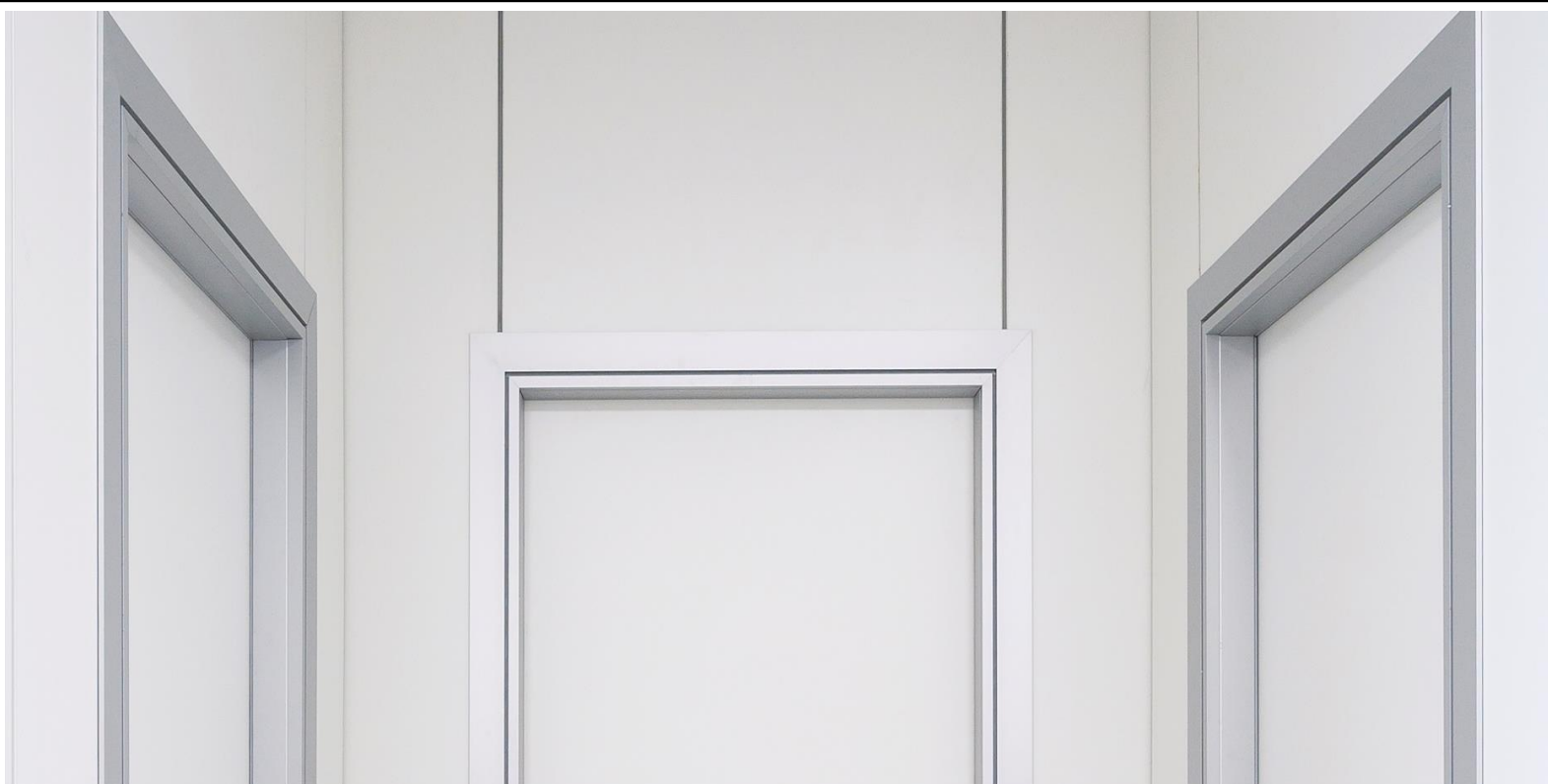
In accordance with ISO 14025 and EN 15804:2012+A2:2019 for:

## **SERIE TREBE\_EXPANDABLE DOOR FRAME** by **Sitab**



Programme:	The International EPD® System, <a href="http://www.environdec.com">www.environdec.com</a>
Programme operator:	EPD International AB
EPD registration number:	S-P-04538
Publication date:	2021-10-05
Valid until:	2026-10-04

*An EPD should provide current information and may be updated if conditions change. The stated validity is therefore subject to the continued registration and publication at [www.environdec.com](http://www.environdec.com)*



## General information

### Programme information

<b>Programme:</b>	The International EPD <sup>®</sup> System
<b>Address:</b>	EPD International AB Box 210 60 SE-100 31 Stockholm Sweden
<b>Website:</b>	<a href="http://www.environdec.com">www.environdec.com</a>
<b>E-mail:</b>	<a href="mailto:info@environdec.com">info@environdec.com</a>

CEN standard EN 15804 serves as the Core Product Category Rules (PCR)
Product category rules (PCR): <i>Construction products, 2019:14, version 1.1 (2020-09-14).</i>
PCR review was conducted by: Claudia A. Peña. The review panel may be contacted via <a href="mailto:info@environdec.com">info@environdec.com</a>
Independent third-party verification of the declaration and data, according to ISO 14025:2006:  <input type="checkbox"/> EPD process certification <input checked="" type="checkbox"/> EPD verification
Third party verifier: Rubén Carnerero Acosta, IK Ingeniería S.L.
Approved by: The International EPD <sup>®</sup> System
Procedure for follow-up of data during EPD validity involves third party verifier:  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

The EPD owner has the sole ownership, liability, and responsibility for the EPD.

EPDs within the same product category but from different programmes may not be comparable. EPDs of construction products may not be comparable if they do not comply with EN 15804. For further information about comparability, see EN 15804 and ISO 14025.

## **Company information:**

Owner of the EPD: Sitab System S.L.U.

Contact: Xabier Agirre Andonegi, (+34) 678 77 93 24, [sitab@sitab.es](mailto:sitab@sitab.es)

Description of the organization:

SITAB SYSTEM S.L.U is a company founded in 2006 with an international scope. Using its own technology, it creates and patents (File U-200701360) the serie\_trebe screen, with a clear vocation for innovation and for providing new solutions to the separation of interior spaces in accordance with principles of sustainable construction.

The main manufacturing plant and headquarters are located in Itziar (Gipuzkoa). It occupies a surface area of 2400 m<sup>2</sup>, 400 m<sup>2</sup> for offices and 2000 m<sup>2</sup> for machining aluminum profiles and melamine panels, pre-assembly of different products, warehouse and dispatch of orders.

Since our foundation, the year-on-year market share growth has been 20%. Currently our annual supply capacity of the different solutions for closing spaces is about 120,000 m<sup>2</sup> of vertical closures, exporting our products to more than 25 countries spread over three continents.

Fostering the improvement of products, processes and services, the most important commitment of SITAB has been the certification both at the business level and at the product certification level. Certification gives us confidence that our systems work efficiently and that we comply with the highest international quality standards.

Since its foundation, at SITAB we have always maintained a proactive attitude regarding the protection of the environment, considering it less and less as a limitation and more and more as a heritage to be regenerated. For this reason, we decided to introduce a production system using clean and eco-efficient technologies.

More than 8 years ago, we were certified within the FSC chain of custody in order to promote the responsible management of forests around the world. That was one of the first steps to have an environmentally sustainable product.

Somewhat later, we applied for the Cradle to Cradle environmental certification. The C2C certificate is the recognition of SITAB's commitment to developing products and processes based on eliminating polluting waste, in accordance with a circular economy.

With the implementation of the UNE EN ISO 14006, environmental management system (Ecodesign), we set out to establish a design system that would incorporate a method of continuous environmental improvement in the design processes.

### Certifications at product level:

- CRADLE TO CRADLE. Rigorous environmental certification.
- ACOUSTIC (UNE-EN ISO 10140-2:2011).
- MECHANICS AND FUNCTIONALITY (UNE-EN 41955-2 and BS 5234-2:1992).
- FIRE RESISTANCE (UNE-EN 13501-2:2009).

### Certification at Company level:

- UNE-EN ISO 9001. Quality management system
- UNE-EN ISO 14001. Environmental management system.
- UNE-EN ISO 14006. Environmental management system. Ecodesign.
- UNE-EN ISO 45001. Health and Safety Management System at Work,
- FSC, being included in the list of companies certified in the Chain of Custody.

Name and location of production site: Sitab System, Parque Empresarial ITZIAR-DEBA, Parcela 12-2, 20829 ITZIAR-DEBA, Guipuzkoa (Spain).

## Product information

UN CPC code: 42120

Product identification: This EPD includes the expandable door frame for rough opening of the Sitab Systems\_trebe serie for interior space separation:

- ST-800 for solid door 50 mm.
- ST-810 for tempered glass door 10 mm.
- ST-815 for framed single glass door 50 mm.
- ST-820 for framed double glass door 50 mm.
- ST-830 for solid door 100 mm.
- St-840 for framed double glass door 100 mm.

Product description: The products analyzed are straight-shaped extruded aluminum telescopic frames, with a matt silver anodized finish or in extra-matt 9011 black lacquer, designed to be perfectly integrated into openings in brick walls or plasterboard enclosures. It is a universal extendable frame compatible with 6 different types of hinged door leaves (50mm or 100mm blind door, tempered glass door, single glass door and 50mm or 100mm framed double glass door).

Its most relevant characteristics are:

- Pressure mounting system, allows covering partitions with thicknesses from 98 to 135 mm.
- Rubber closure perimeter of the leaf of the extendable frame, the rubber allows a perfect damping and insulation of the passage doors.
- Hardware (lock, handle and hinges) made of stainless steel.
- System certified by "Cradle to Cradle" at Bronze level.
- Certificate in Mechanics and Functionality (UNE-EN 41955-2) for its use of maximum demand (use category 4).

## LCA information

Declared unit: 1 m<sup>2</sup> of door framed. The quantity of expandable door frame required for covering this space is:

- 27.32 kg/m<sup>2</sup> for ST-800
- 34.40 kg/m<sup>2</sup> for ST-810
- 39.49 kg/m<sup>2</sup> for ST-815
- 35.55 kg/m<sup>2</sup> for ST-820
- 44.17 kg/m<sup>2</sup> for ST-830
- 38.64 kg/m<sup>2</sup> for ST-840

Reference service life: The systems analyzed are removable and can be reinstalled if necessary (tests under the UNE-EN 41955-2 standard). However, even if the product remains functional, it is usually uninstalled due to the remodeling of the facilities or the closure of economic activity. In the experience of Sitab Systems, the average useful life of these systems is between 12 and 15 years.

Time representativeness: Primary data refers to a full year, from 2019/01/03 to 2020/02/29.

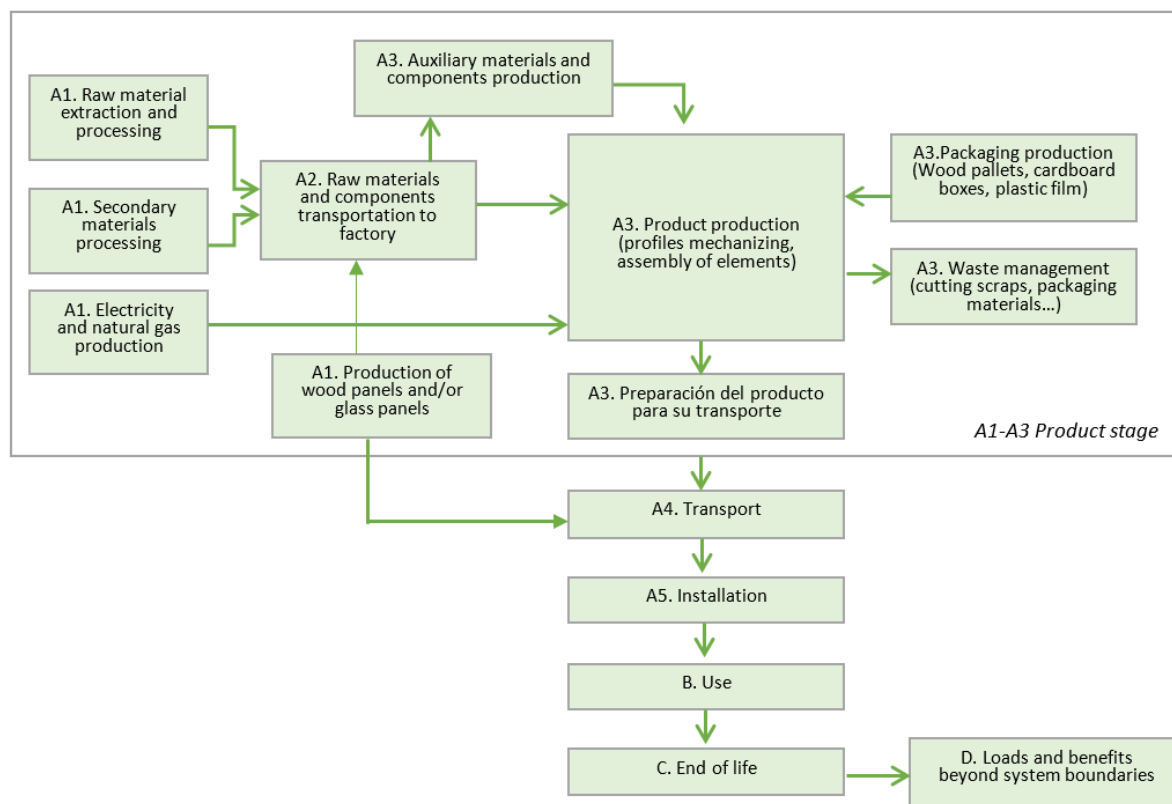
LCA study developed by: Marcel Gómez Consultoría Ambiental ([info@marcelgomez.com](mailto:info@marcelgomez.com))

Database and LCA software used: Ecoinvent 3.6 and SimaPro.

Description of system boundaries: Cradle to gate with options, modules C1-C4, module D and with optional modules A4-A5 and B1-B7. Therefore, modules A, B, C and D are included.

Cut-off rules: Life cycle inventory data more than 95% of total inflows (mass and energy) per module.

System diagram:



More information available at: [www.sitab.es](http://www.sitab.es)

**Additional technical information for A4 – transport to the construction site (national scenario)**

SCENARIO INFORMATION	VALUE / DESCRIPTION
Type of vehicle used	Long distance truck
Load capacity	24 tones
Fuel consumption	51.62 liters of gasoil per 100 km
Average distance to the construction site	435 km by truck 2094 km by ship
Load use (including empty returns)	49.9% (as per Ecoinvent)
Transport product density	Products are transported with other elements. Average density of a pallet: 297 kg/m <sup>3</sup>
Volume capacity coefficient	< 1

**Additional technical information for A5 – product installation**

SCENARIO INFORMATION	VALUE / DESCRIPTION
Auxiliary inputs for installations	Not needed
Water use	Not needed
Other resources use	Not needed
Quantitative description by energy type and consumption during product installation	Not needed
Direct emission in the air, soil and water	Not generated
	2.765 kg/m <sup>2</sup> for ST-800

Materials (specified by type) produced by waste treatment on building	3.480 kg/m <sup>2</sup> for ST-810 3.490 kg/m <sup>2</sup> for ST-815 3.597 kg/m <sup>2</sup> for ST-820 4.469 kg/m <sup>2</sup> for ST-830 3.910 kg/m <sup>2</sup> for ST-840  Packaging composition: 76% pine wood, 21% cardboard, 3% LLDPE and 0.2% PP.
Waste produced by product installation	Not generated

#### Additional technical information for C1-C4 End of Life

SCENARIO INFORMATION		VALUE FOR DECLARED UNIT					
		ST-800	ST-810	ST-815	ST-820	ST-830	ST-840
Collection process specified by type	kg of product mixed with other construction waste	27.3	34.4	39.5	35.5	44.2	38.6
Recovery system specified by type	Recycling of 95% of Steel and aluminium and recycling of 43.5% of Wood Energy recovery of 41.8% of wood.						
Waste treatment specified by type	kg steel to recycling	0.7	0.5	0.6	0.7	0.8	0.8
	kg aluminum to recycling	8.9	9.4	12.1	13.1	8.9	12.9
	kg wood to recycling	7.1	0.0	0.0	0.0	14.3	0.0
	kg wood for energy valorisation	7.1	0.0	0.0	0.0	14.3	0.0
	kg wood for incineration	2.3	0.0	0.0	0.0	4.5	0.0
	kg materials for landfill	1.4	24.4	26.8	21.7	1.9	24.8
Assumptions for waste transportation	16-32 metric ton truck Euro VI class Average load: 5.79 tones Diesel consumption: 25.5 l/100 Km Distance: 50 km						

Modules declared, geographical scope, share of specific data (in GWP-GHG indicator) and data variation:

	Product stage		Construction process stage			Use stage							End of life stage				Resource recovery stage
	Raw material supply	Transport	Manufacturing	Transport	Construction installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling-potential
Module	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Modules declared	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Geography	ES	ES	ES	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO
Specific data	GWP > 97%					-	-	-	-	-	-	-	-	-	-	-	-
Variation – products	No applicable					-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites	No applicable					-	-	-	-	-	-	-	-	-	-	-	-

## Content information

	Weight for declared unit (kg/m²)							
Components	ST-800	ST-810	ST-815	ST-820	ST-830	ST-840	Post-consumer material (% weight)	Renewable material (% weight)
Plastics and others	0.78	0.46	0.46	0.50	1.10	0.54	0	0
Aluminium	9.34	9.92	12.70	13.79	9.34	13.63	26.8	0
Steel	0.78	0.55	0.67	0.78	0.88	0.89	20	0
Chipboard panel	16.42	0.00	0.00	0.00	32.84	0.00	30	88
Glass	0.00	23.47	25.66	20.49	0.00	23.58	0	0
<b>TOTAL</b>	<b>27.32</b>	<b>34.40</b>	<b>39.49</b>	<b>35.55</b>	<b>44.17</b>	<b>38.64</b>	-	-
Packaging	ST-800	ST-810	ST-815	ST-820	ST-830	ST-840	% in weight in relation to product	
Wood (pallet)	2.11	2.65	2.66	2.74	3.41	2.98	7.71	
Cardboard	0.59	0.74	0.74	0.76	0.95	0.83	2.15	
Plastic	0.07	0.09	0.09	0.09	0.12	0.10	0.26	
<b>TOTAL</b>	<b>2.76</b>	<b>3.48</b>	<b>3.49</b>	<b>3.60</b>	<b>4.47</b>	<b>3.91</b>	<b>10.12</b>	
<b>TOTAL PACKAGED PRODUCT</b>	<b>30.09</b>	<b>37.88</b>	<b>37.98</b>	<b>39.15</b>	<b>48.65</b>	<b>42.56</b>		

Declared products do not contain any substance nor raw material in a quantity superior to 0.1% in weight which appears in the Candidate List of substances of very high concern (SVHC) for Authorization. These products are Cradle-to-Cradle certified (bronze level).



## Environmental Information

For each module, results are declared for the module alone and for the module using the KUBIK system.

The following acronyms are used:

### For mandatory indicators according to EN 15804:

GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption

Disclaimer: The results of the environmental impact indicators marked with \* shall be used with care as the uncertainties of these results are high or as there is limited experience with the indicator.

GWP-GHG The indicator includes all greenhouse gases included in GWP-total but excludes biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. This indicator is thus equal to the GWP indicator originally defined in EN 15804:2012+A1:2013

### For other indicators:

**Use of resources:** PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy re-sources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water

Waste production and output flows: HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CFRU = Components for re-use; MFR = Material for recycling; MFER = Material for energy recovery; EE-e = Exported energy, electricity; EE-t = Exported energy – thermal.

## 1) ST-800

Results per declared unit																
Indicator	Unit	Tot.A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-fossil	kg CO <sub>2</sub> eq.	1.13E+02	1.18E+00	2.26E-02	0	0	0	0	0	0	0	0	2.23E-01	3.40E-02	2.60E-02	-2.83E+01
GWP-biogenic	kg CO <sub>2</sub> eq.	-2.54E+01	4.36E-04	1.21E-05	0	0	0	0	0	0	0	0	1.20E-04	3.59E-04	6.72E+00	1.85E+01
GWP-luluc	kg CO <sub>2</sub> eq.	1.81E+00	1.41E-05	8.04E-06	0	0	0	0	0	0	0	0	7.94E-05	2.47E-05	4.26E-06	-5.93E-01
GWP-total	kg CO <sub>2</sub> eq.	8.90E+01	1.18E+00	2.26E-02	0	0	0	0	0	0	0	0	2.23E-01	3.44E-02	6.74E+00	-1.04E+01
ODP	kg CFC 11 eq.	8.60E-06	2.64E-07	5.14E-09	0	0	0	0	0	0	0	0	5.08E-08	6.32E-09	4.24E-09	-2.43E-06
AP	mol H <sup>+</sup> eq.	8.85E-01	6.50E-03	6.49E-05	0	0	0	0	0	0	0	0	6.41E-04	2.03E-04	1.40E-03	-2.46E-01
EP-freshwater	kg PO <sub>4</sub> <sup>3-</sup> eq.	2.03E-02	7.84E-06	5.54E-07	0	0	0	0	0	0	0	0	5.47E-06	3.47E-06	7.14E-07	-4.03E-03
	kg P eq.	6.60E-03	2.55E-06	1.80E-07	0	0	0	0	0	0	0	0	1.78E-06	1.13E-06	2.32E-07	-1.31E-03
EP-marine	kg N eq.	1.11E-01	7.55E-04	1.28E-05	0	0	0	0	0	0	0	0	1.27E-04	6.67E-05	6.68E-04	-2.19E-02
EP-terrestrial	mol N eq.	1.25E+00	8.55E-03	1.44E-04	0	0	0	0	0	0	0	0	1.42E-03	7.42E-04	7.66E-03	-2.39E-01
POCP	kg NMVOC eq.	4.28E-01	2.72E-03	5.50E-05	0	0	0	0	0	0	0	0	5.44E-04	1.93E-04	1.98E-03	-9.20E-02
ADP-minerals&metals	kg Sb eq.	4.32E-03	3.22E-07	6.23E-07	0	0	0	0	0	0	0	0	6.16E-06	1.40E-08	2.02E-08	2.42E-02
ADP-fossil	MJ	1.36E+03	1.64E+01	3.41E-01	0	0	0	0	0	0	0	0	3.37E+00	5.52E-01	2.75E-01	-3.34E+02
WDP	m <sup>3</sup>	3.50E+01	4.25E-03	9.66E-04	0	0	0	0	0	0	0	0	9.55E-03	2.24E-03	1.12E-02	-1.00E+01
GWP-GHG	kg CO <sub>2</sub> eq.	1.14E+02	1.18E+00	2.26E-02	0	0	0	0	0	0	0	0	2.23E-01	3.40E-02	2.60E-02	-2.89E+01
PERE	MJ	1.01E+03	2.01E-02	4.89E-03	0	0	0	0	0	0	0	0	4.83E-02	4.13E-02	7.16E-03	-2.92E+02
PERM	MJ	9.71E+01	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	1.11E+03	2.01E-02	4.89E-03	0	0	0	0	0	0	0	0	4.83E-02	4.13E-02	7.16E-03	-2.92E+02
PENRE	MJ	1.44E+03	1.74E+01	3.62E-01	0	0	0	0	0	0	0	0	3.58E+00	5.83E-01	2.99E-01	-3.52E+02
PENRM	MJ.	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ	1.44E+03	1.74E+01	3.62E-01	0	0	0	0	0	0	0	0	3.58E+00	5.83E-01	2.99E-01	-3.52E+02
SM	kg	7.59E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m <sup>3</sup>	1.76E+00	3.33E-04	3.65E-05	0	0	0	0	0	0	0	0	3.61E-04	1.81E-04	2.04E-03	-6.42E-01
HWD	kg	1.53E-01	4.08E-05	8.94E-07	0	0	0	0	0	0	0	0	8.84E-06	9.39E-07	5.23E-07	5.10E-02
NHWD	kg	3.09E+01	4.09E-03	1.66E-02	0	0	0	0	0	0	0	0	1.64E-01	3.70E-04	1.47E+00	-6.72E+00
RWD	kg	5.35E-03	1.17E-04	2.33E-06	0	0	0	0	0	0	0	0	2.30E-05	3.98E-06	8.30E-07	-1.86E-03
CFRU	kg	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR	kg	6.53E-01	0.00E+00	2.77E+00	0	0	0	0	0	0	0	0	0.00E+00	1.01E+01	0.00E+00	0.00E+00
MFER	kg	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	7.14E+00	0.00E+00	0.00E+00
EE-e	MJ	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	1.26E+01
EE-t	MJ	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	2.50E+01

## 2) ST-810

Results per declared unit																
Indicator	Unit	Tot.A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-fossil	kg CO <sub>2</sub> eq.	1.26E+02	2.26E-02	2.26E-02	0	0	0	0	0	0	0	0	2.81E-01	3.52E-02	6.16E-02	-2.77E+01
GWP-biogenic	kg CO <sub>2</sub> eq.	6.06E-01	1.21E-05	1.21E-05	0	0	0	0	0	0	0	0	1.51E-04	3.71E-04	2.04E-04	-6.16E-02
GWP-luluc	kg CO <sub>2</sub> eq.	1.63E+00	8.04E-06	8.04E-06	0	0	0	0	0	0	0	0	1.00E-04	2.55E-05	1.51E-06	-6.15E-01
GWP-total	kg CO <sub>2</sub> eq.	1.28E+02	2.26E-02	2.26E-02	0	0	0	0	0	0	0	0	2.81E-01	3.56E-02	6.18E-02	-2.84E+01
ODP	kg CFC 11 eq.	1.17E-05	5.14E-09	5.14E-09	0	0	0	0	0	0	0	0	6.39E-08	6.54E-09	1.29E-08	-2.33E-06
AP	mol H <sup>+</sup> eq.	1.06E+00	6.49E-05	6.49E-05	0	0	0	0	0	0	0	0	8.07E-04	2.10E-04	6.36E-04	-2.50E-01
EP-freshwater	kg PO <sub>4</sub> <sup>3-</sup> eq.	1.26E-02	5.54E-07	5.54E-07	0	0	0	0	0	0	0	0	6.89E-06	3.59E-06	6.91E-07	-4.04E-03
	kg P eq.	4.11E-03	1.80E-07	1.80E-07	0	0	0	0	0	0	0	0	2.24E-06	1.17E-06	2.25E-07	-1.31E-03
EP-marine	kg N eq.	1.36E-01	1.28E-05	1.28E-05	0	0	0	0	0	0	0	0	1.60E-04	6.90E-05	2.76E-04	-2.20E-02
EP-terrestrial	mol N eq.	1.57E+00	1.44E-04	1.44E-04	0	0	0	0	0	0	0	0	1.79E-03	7.68E-04	3.03E-03	-2.40E-01
POCP	kg NMVOC eq.	4.88E-01	5.50E-05	5.50E-05	0	0	0	0	0	0	0	0	6.85E-04	2.00E-04	8.44E-04	-9.24E-02
ADP-minerals&metals	kg Sb eq.	5.66E-03	6.23E-07	6.23E-07	0	0	0	0	0	0	0	0	7.76E-06	1.45E-08	2.56E-08	2.57E-02
ADP-fossil	MJ	1.48E+03	3.41E-01	3.41E-01	0	0	0	0	0	0	0	0	4.25E+00	5.70E-01	8.22E-01	-3.12E+02
WDP	m <sup>3</sup>	3.74E+01	9.66E-04	9.66E-04	0	0	0	0	0	0	0	0	1.20E-02	2.31E-03	2.82E-04	-9.84E+00
GWP-GHG	kg CO <sub>2</sub> eq.	1.27E+02	2.26E-02	2.26E-02	0	0	0	0	0	0	0	0	2.81E-01	3.52E-02	6.16E-02	-2.83E+01
PERE	MJ	6.89E+02	4.46E-02	4.89E-03	0	0	0	0	0	0	0	0	6.08E-02	4.27E-02	3.11E-03	-2.06E+02
PERM	MJ	9.71E+01	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	7.86E+02	4.46E-02	4.89E-03	0	0	0	0	0	0	0	0	6.08E-02	4.27E-02	3.11E-03	-2.06E+02
PENRE	MJ	1.54E+03	3.86E+01	3.62E-01	0	0	0	0	0	0	0	0	4.51E+00	6.03E-01	8.73E-01	-3.28E+02
PENRM	MJ.	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ	1.54E+03	3.86E+01	3.62E-01	0	0	0	0	0	0	0	0	4.51E+00	6.03E-01	8.73E-01	-3.28E+02
SM	kg	4.27E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m <sup>3</sup>	1.83E+00	7.11E-04	3.65E-05	0	0	0	0	0	0	0	0	4.54E-04	1.87E-04	1.68E-05	-6.73E-01
HWD	kg	1.61E-01	8.83E-05	8.94E-07	0	0	0	0	0	0	0	0	1.11E-05	9.71E-07	2.07E-06	5.42E-02
NHWD	kg	3.32E+01	8.86E-03	1.66E-02	0	0	0	0	0	0	0	0	2.07E-01	3.83E-04	2.44E+01	-7.14E+00
RWD	kg	6.05E-03	2.58E-04	2.33E-06	0	0	0	0	0	0	0	0	2.89E-05	4.12E-06	5.70E-06	-1.74E-03
CFRU	kg	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR	kg	6.53E-01	0.00E+00	3.48E+00	0	0	0	0	0	0	0	0	0.00E+00	1.05E+01	0.00E+00	0.00E+00
MFER	kg	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EE-e	MJ	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EE-t	MJ	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00

### 3) ST-815

Results per declared unit																
Indicator	Unit	Tot.A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-fossil	kg CO <sub>2</sub> eq.	1.67E+02	2.61E+00	2.26E-02	0	0	0	0	0	0	0	0	3.23E-01	4.49E-02	6.75E-02	-3.53E+01
GWP-biogenic	kg CO <sub>2</sub> eq.	7.12E-01	9.77E-04	1.21E-05	0	0	0	0	0	0	0	0	1.73E-04	4.74E-04	2.23E-04	-7.86E-02
GWP-luluc	kg CO <sub>2</sub> eq.	2.10E+00	3.10E-05	8.04E-06	0	0	0	0	0	0	0	0	1.15E-04	3.26E-05	1.65E-06	-7.85E-01
GWP-total	kg CO <sub>2</sub> eq.	1.70E+02	2.61E+00	2.26E-02	0	0	0	0	0	0	0	0	3.23E-01	4.54E-02	6.77E-02	-3.62E+01
ODP	kg CFC 11 eq.	1.61E-05	5.86E-07	5.14E-09	0	0	0	0	0	0	0	0	7.34E-08	8.35E-09	1.41E-08	-2.98E-06
AP	mol H <sup>+</sup> eq.	1.37E+00	1.65E-02	6.49E-05	0	0	0	0	0	0	0	0	9.26E-04	2.68E-04	6.97E-04	-3.19E-01
EP-freshwater	kg PO <sub>4</sub> <sup>3-</sup> eq.	1.74E-02	1.70E-05	5.54E-07	0	0	0	0	0	0	0	0	7.91E-06	4.59E-06	7.57E-07	-5.15E-03
	kg P eq.	5.68E-03	5.55E-06	1.80E-07	0	0	0	0	0	0	0	0	2.58E-06	1.49E-06	2.47E-07	-1.68E-03
EP-marine	kg N eq.	1.78E-01	1.86E-03	1.28E-05	0	0	0	0	0	0	0	0	1.83E-04	8.81E-05	3.03E-04	-2.81E-02
EP-terrestrial	mol N eq.	2.04E+00	2.10E-02	1.44E-04	0	0	0	0	0	0	0	0	2.05E-03	9.80E-04	3.32E-03	-3.06E-01
POCP	kg NMVOC eq.	6.35E-01	6.62E-03	5.50E-05	0	0	0	0	0	0	0	0	7.86E-04	2.55E-04	9.24E-04	-1.18E-01
ADP-minerals&metals	kg Sb eq.	4.65E-03	6.96E-07	6.23E-07	0	0	0	0	0	0	0	0	8.90E-06	1.85E-08	2.80E-08	3.28E-02
ADP-fossil	MJ	1.96E+03	3.64E+01	3.41E-01	0	0	0	0	0	0	0	0	4.88E+00	7.29E-01	9.01E-01	-3.98E+02
WDP	m <sup>3</sup>	5.39E+01	8.79E-03	9.66E-04	0	0	0	0	0	0	0	0	1.38E-02	2.95E-03	3.09E-04	-1.25E+01
GWP-GHG	kg CO <sub>2</sub> eq.	1.69E+02	2.61E+00	2.26E-02	0	0	0	0	0	0	0	0	3.23E-01	4.49E-02	6.75E-02	-3.61E+01
PERE	MJ	8.71E+02	4.46E-02	4.89E-03	0	0	0	0	0	0	0	0	6.98E-02	5.45E-02	3.40E-03	-2.63E+02
PERM	MJ	9.71E+01	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	9.68E+02	4.46E-02	4.89E-03	0	0	0	0	0	0	0	0	6.98E-02	5.45E-02	3.40E-03	-2.63E+02
PENRE	MJ	2.08E+03	3.86E+01	3.62E-01	0	0	0	0	0	0	0	0	5.18E+00	7.70E-01	9.56E-01	-4.19E+02
PENRM	MJ.	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ	2.08E+03	3.86E+01	3.62E-01	0	0	0	0	0	0	0	0	5.18E+00	7.70E-01	9.56E-01	-4.19E+02
SM	kg	5.18E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m <sup>3</sup>	2.48E+00	7.12E-04	3.65E-05	0	0	0	0	0	0	0	0	5.22E-04	2.39E-04	1.84E-05	-8.58E-01
HWD	kg	2.11E-01	8.84E-05	8.94E-07	0	0	0	0	0	0	0	0	1.28E-05	1.24E-06	2.27E-06	6.91E-02
NHWD	kg	4.77E+01	8.87E-03	1.66E-02	0	0	0	0	0	0	0	0	2.37E-01	4.89E-04	2.68E+01	-9.10E+00
RWD	kg	8.03E-03	2.59E-04	2.33E-06	0	0	0	0	0	0	0	0	3.32E-05	5.26E-06	6.25E-06	-2.22E-03
CFRU	kg	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR	kg	6.53E-01	0.00E+00	2.77E+00	0	0	0	0	0	0	0	0	0.00E+00	1.34E+01	0.00E+00	0.00E+00
MFER	kg	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EE-e	MJ	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EE-t	MJ	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00

#### 4) ST-820

Results per declared unit																
Indicator	Unit	Tot.A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-fossil	kg CO <sub>2</sub> eq.	1.58E+02	2.70E+00	2.26E-02	0	0	0	0	0	0	0	0	2.90E-01	4.89E-02	5.47E-02	-3.86E+01
GWP-biogenic	kg CO <sub>2</sub> eq.	7.08E-01	1.01E-03	1.21E-05	0	0	0	0	0	0	0	0	1.56E-04	5.16E-04	1.81E-04	-8.58E-02
GWP-luluc	kg CO <sub>2</sub> eq.	2.24E+00	3.21E-05	8.04E-06	0	0	0	0	0	0	0	0	1.03E-04	3.55E-05	1.34E-06	-8.56E-01
GWP-total	kg CO <sub>2</sub> eq.	1.61E+02	2.70E+00	2.26E-02	0	0	0	0	0	0	0	0	2.91E-01	4.95E-02	5.49E-02	-3.95E+01
ODP	kg CFC 11 eq.	1.38E-05	6.05E-07	5.14E-09	0	0	0	0	0	0	0	0	6.61E-08	9.10E-09	1.14E-08	-3.25E-06
AP	mol H <sup>+</sup> eq.	1.31E+00	1.71E-02	6.49E-05	0	0	0	0	0	0	0	0	8.34E-04	2.92E-04	5.65E-04	-3.48E-01
EP-freshwater	kg PO <sub>4</sub> <sup>3-</sup> eq.	1.67E-02	1.76E-05	5.54E-07	0	0	0	0	0	0	0	0	7.12E-06	5.00E-06	6.14E-07	-5.62E-03
	kg P eq.	5.44E-03	5.73E-06	1.80E-07	0	0	0	0	0	0	0	0	2.32E-06	1.63E-06	2.00E-07	-1.83E-03
EP-marine	kg N eq.	1.65E-01	1.92E-03	1.28E-05	0	0	0	0	0	0	0	0	1.65E-04	9.60E-05	2.45E-04	-3.07E-02
EP-terrestrial	mol N eq.	1.89E+00	2.17E-02	1.44E-04	0	0	0	0	0	0	0	0	1.85E-03	1.07E-03	2.69E-03	-3.35E-01
POCP	kg NMVOC eq.	6.02E-01	6.84E-03	5.50E-05	0	0	0	0	0	0	0	0	7.08E-04	2.78E-04	7.49E-04	-1.29E-01
ADP-minerals&metals	kg Sb eq.	4.86E-03	7.19E-07	6.23E-07	0	0	0	0	0	0	0	0	8.02E-06	2.01E-08	2.27E-08	3.58E-02
ADP-fossil	MJ	1.85E+03	3.76E+01	3.41E-01	0	0	0	0	0	0	0	0	4.39E+00	7.93E-01	7.30E-01	-4.34E+02
WDP	m <sup>3</sup>	4.87E+01	9.08E-03	9.66E-04	0	0	0	0	0	0	0	0	1.24E-02	3.22E-03	2.51E-04	-1.37E+01
GWP-GHG	kg CO <sub>2</sub> eq.	1.60E+02	2.70E+00	2.26E-02	0	0	0	0	0	0	0	0	2.90E-01	4.90E-02	5.47E-02	-3.94E+01
PERE	MJ	9.15E+02	4.61E-02	4.89E-03	0	0	0	0	0	0	0	0	6.29E-02	5.94E-02	2.76E-03	-2.87E+02
PERM	MJ	9.71E+01	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	1.01E+03	4.61E-02	4.89E-03	0	0	0	0	0	0	0	0	6.29E-02	5.94E-02	2.76E-03	-2.87E+02
PENRE	MJ	1.96E+03	3.99E+01	3.62E-01	0	0	0	0	0	0	0	0	4.66E+00	8.38E-01	7.75E-01	-4.57E+02
PENRM	MJ.	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ	1.96E+03	3.99E+01	3.62E-01	0	0	0	0	0	0	0	0	4.66E+00	8.38E-01	7.75E-01	-4.57E+02
SM	kg	5.16E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m <sup>3</sup>	2.45E+00	7.35E-04	3.65E-05	0	0	0	0	0	0	0	0	4.70E-04	2.60E-04	1.49E-05	-9.36E-01
HWD	kg	2.26E-01	9.14E-05	8.94E-07	0	0	0	0	0	0	0	0	1.15E-05	1.35E-06	1.84E-06	7.54E-02
NHWD	kg	4.55E+01	9.17E-03	1.66E-02	0	0	0	0	0	0	0	0	2.14E-01	5.33E-04	2.17E+01	-9.93E+00
RWD	kg	7.74E-03	2.67E-04	2.33E-06	0	0	0	0	0	0	0	0	2.99E-05	5.73E-06	5.06E-06	-2.42E-03
CFRU	kg	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR	kg	6.53E-01	0.00E+00	2.77E+00	0	0	0	0	0	0	0	0	0.00E+00	1.46E+01	0.00E+00	0.00E+00
MFER	kg	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EE-e	MJ	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EE-t	MJ	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00

## 5) ST-830

Results per declared unit																
Indicator	Unit	Tot.A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-fossil	kg CO <sub>2</sub> eq.	1.31E+02	1.55E+00	2.26E-02	0	0	0	0	0	0	0	0	3.61E-01	3.43E-02	2.67E-02	-3.04E+01
GWP-biogenic	kg CO <sub>2</sub> eq.	-5.12E+01	5.72E-04	1.21E-05	0	0	0	0	0	0	0	0	1.94E-04	3.62E-04	6.57E+00	3.71E+01
GWP-luluc	kg CO <sub>2</sub> eq.	2.11E+00	1.87E-05	8.04E-06	0	0	0	0	0	0	0	0	1.28E-04	2.49E-05	4.20E-06	-6.06E-01
GWP-total	kg CO <sub>2</sub> eq.	8.19E+01	1.55E+00	2.26E-02	0	0	0	0	0	0	0	0	3.61E-01	3.47E-02	6.60E+00	6.12E+00
ODP	kg CFC 11 eq.	9.34E-06	3.49E-07	5.14E-09	0	0	0	0	0	0	0	0	8.21E-08	6.39E-09	4.41E-09	-2.66E-06
AP	mol H <sup>+</sup> eq.	1.03E+00	7.91E-03	6.49E-05	0	0	0	0	0	0	0	0	1.04E-03	2.05E-04	1.38E-03	-2.55E-01
EP-freshwater	kg PO <sub>4</sub> <sup>3-</sup> eq.	2.98E-02	1.04E-05	5.54E-07	0	0	0	0	0	0	0	0	8.85E-06	3.51E-06	7.12E-07	-4.25E-03
	kg P eq.	9.71E-03	3.40E-06	1.80E-07	0	0	0	0	0	0	0	0	2.88E-06	1.14E-06	2.32E-07	-1.38E-03
EP-marine	kg N eq.	1.32E-01	9.40E-04	1.28E-05	0	0	0	0	0	0	0	0	2.05E-04	6.74E-05	6.59E-04	-2.30E-02
EP-terrestrial	mol N eq.	1.50E+00	1.06E-02	1.44E-04	0	0	0	0	0	0	0	0	2.29E-03	7.50E-04	7.55E-03	-2.51E-01
POCP	kg NMVOC eq.	5.13E-01	3.40E-03	5.50E-05	0	0	0	0	0	0	0	0	8.79E-04	1.95E-04	1.96E-03	-9.64E-02
ADP-minerals&metals	kg Sb eq.	5.51E-03	4.31E-07	6.23E-07	0	0	0	0	0	0	0	0	9.96E-06	1.41E-08	2.03E-08	2.42E-02
ADP-fossil	MJ	1.60E+03	2.17E+01	3.41E-01	0	0	0	0	0	0	0	0	5.45E+00	5.57E-01	2.86E-01	-3.74E+02
WDP	m <sup>3</sup>	3.98E+01	5.80E-03	9.66E-04	0	0	0	0	0	0	0	0	1.54E-02	2.26E-03	1.10E-02	-1.08E+01
GWP-GHG	kg CO <sub>2</sub> eq.	1.33E+02	1.55E+00	2.26E-02	0	0	0	0	0	0	0	0	3.61E-01	3.44E-02	2.67E-02	-3.10E+01
PERE	MJ	1.44E+03	2.65E-02	4.89E-03	0	0	0	0	0	0	0	0	7.81E-02	4.17E-02	7.07E-03	-3.90E+02
PERM	MJ	9.71E+01	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	1.54E+03	2.65E-02	4.89E-03	0	0	0	0	0	0	0	0	7.81E-02	4.17E-02	7.07E-03	-3.90E+02
PENRE	MJ	1.69E+03	2.30E+01	3.62E-01	0	0	0	0	0	0	0	0	5.79E+00	5.89E-01	3.10E-01	-3.94E+02
PENRM	MJ.	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ	1.69E+03	2.30E+01	3.62E-01	0	0	0	0	0	0	0	0	5.79E+00	5.89E-01	3.10E-01	-3.94E+02
SM	kg	1.25E+01	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m <sup>3</sup>	1.93E+00	4.47E-04	3.65E-05	0	0	0	0	0	0	0	0	5.83E-04	1.83E-04	2.00E-03	-6.50E-01
HWD	kg	1.54E-01	5.44E-05	8.94E-07	0	0	0	0	0	0	0	0	1.43E-05	9.48E-07	5.55E-07	5.09E-02
NHWD	kg	3.19E+01	5.46E-03	1.66E-02	0	0	0	0	0	0	0	0	2.66E-01	3.74E-04	1.95E+00	-6.70E+00
RWD	kg	5.99E-03	1.54E-04	2.33E-06	0	0	0	0	0	0	0	0	3.72E-05	4.02E-06	9.31E-07	-2.08E-03
CFRU	kg	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR	kg	6.53E-01	0.00E+00	2.77E+00	0	0	0	0	0	0	0	0	0.00E+00	1.02E+01	0.00E+00	0.00E+00
MFER	kg	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	1.43E+01	0.00E+00	0.00E+00
EE-e	MJ	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	2.51E+01
EE-t	MJ	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	5.00E+01

## 6) ST-840

Results per declared unit																
Indicator	Unit	Tot.A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-fossil	kg CO <sub>2</sub> eq.	1.60E+02	2.93E+00	2.26E-02	0	0	0	0	0	0	0	0	3.16E-01	4.88E-02	6.26E-02	-3.83E+01
GWP-biogenic	kg CO <sub>2</sub> eq.	7.34E-01	1.10E-03	1.21E-05	0	0	0	0	0	0	0	0	1.70E-04	5.14E-04	2.07E-04	-8.50E-02
GWP-luluc	kg CO <sub>2</sub> eq.	2.22E+00	3.49E-05	8.04E-06	0	0	0	0	0	0	0	0	1.12E-04	3.54E-05	1.53E-06	-8.47E-01
GWP-total	kg CO <sub>2</sub> eq.	1.63E+02	2.93E+00	2.26E-02	0	0	0	0	0	0	0	0	3.16E-01	4.93E-02	6.28E-02	-3.92E+01
ODP	kg CFC 11 eq.	1.41E-05	6.58E-07	5.14E-09	0	0	0	0	0	0	0	0	7.18E-08	9.07E-09	1.31E-08	-3.22E-06
AP	mol H <sup>+</sup> eq.	1.35E+00	1.86E-02	6.49E-05	0	0	0	0	0	0	0	0	9.06E-04	2.91E-04	6.46E-04	-3.45E-01
EP-freshwater	kg PO <sub>4</sub> <sup>3-</sup> eq.	1.71E-02	1.91E-05	5.54E-07	0	0	0	0	0	0	0	0	7.74E-06	4.98E-06	7.02E-07	-5.58E-03
	kg P eq.	5.57E-03	6.23E-06	1.80E-07	0	0	0	0	0	0	0	0	2.52E-06	1.62E-06	2.29E-07	-1.82E-03
EP-marine	kg N eq.	1.69E-01	2.08E-03	1.28E-05	0	0	0	0	0	0	0	0	1.79E-04	9.57E-05	2.81E-04	-3.04E-02
EP-terrestrial	mol N eq.	1.96E+00	2.36E-02	1.44E-04	0	0	0	0	0	0	0	0	2.01E-03	1.06E-03	3.08E-03	-3.32E-01
POCP	kg NMVOC eq.	6.17E-01	7.43E-03	5.50E-05	0	0	0	0	0	0	0	0	7.69E-04	2.77E-04	8.57E-04	-1.28E-01
ADP-minerals&metals	kg Sb eq.	6.12E-03	7.81E-07	6.23E-07	0	0	0	0	0	0	0	0	8.71E-06	2.01E-08	2.60E-08	3.54E-02
ADP-fossil	MJ	1.87E+03	4.09E+01	3.41E-01	0	0	0	0	0	0	0	0	4.77E+00	7.91E-01	8.36E-01	-4.31E+02
WDP	m <sup>3</sup>	4.91E+01	9.87E-03	9.66E-04	0	0	0	0	0	0	0	0	1.35E-02	3.21E-03	2.87E-04	-1.35E+01
GWP-GHG	kg CO <sub>2</sub> eq.	1.62E+02	2.93E+00	2.26E-02	0	0	0	0	0	0	0	0	3.16E-01	4.88E-02	6.26E-02	-3.91E+01
PERE	MJ	9.14E+02	5.01E-02	4.89E-03	0	0	0	0	0	0	0	0	6.83E-02	5.92E-02	3.16E-03	-2.84E+02
PERM	MJ	9.71E+01	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	1.01E+03	5.01E-02	4.89E-03	0	0	0	0	0	0	0	0	6.83E-02	5.92E-02	3.16E-03	-2.84E+02
PENRE	MJ	1.99E+03	4.34E+01	3.62E-01	0	0	0	0	0	0	0	0	5.07E+00	8.36E-01	8.87E-01	-4.54E+02
PENRM	MJ.	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ	1.99E+03	4.34E+01	3.62E-01	0	0	0	0	0	0	0	0	5.07E+00	8.36E-01	8.87E-01	-4.54E+02
SM	kg	5.34E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m <sup>3</sup>	2.45E+00	7.99E-04	3.65E-05	0	0	0	0	0	0	0	0	5.10E-04	2.59E-04	1.70E-05	-9.26E-01
HWD	kg	2.24E-01	9.93E-05	8.94E-07	0	0	0	0	0	0	0	0	1.25E-05	1.35E-06	2.10E-06	7.46E-02
NHWD	kg	4.52E+01	9.96E-03	1.66E-02	0	0	0	0	0	0	0	0	2.32E-01	5.31E-04	2.48E+01	-9.84E+00
RWD	kg	7.81E-03	2.90E-04	2.33E-06	0	0	0	0	0	0	0	0	3.25E-05	5.71E-06	5.79E-06	-2.40E-03
CFRU	kg	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR	kg	6.53E-01	0.00E+00	2.77E+00	0	0	0	0	0	0	0	0	0.00E+00	1.45E+01	0.00E+00	0.00E+00
MFER	kg	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EE-e	MJ	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EE-t	MJ	0.00E+00	0.00E+00	0.00E+00	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00

## Information on biogenic carbon content

Results per declared unit (1 m <sup>2</sup> )							
<b>BIOGENIC CARBON CONTENT</b>	<b>Unit</b>	<b>ST-800</b>	<b>ST-810</b>	<b>ST-815</b>	<b>ST-820</b>	<b>ST-830</b>	<b>ST-840</b>
Biogenic carbon content in product	kg C	7.55	0.00	0.00	0.00	15.11	0.00
Biogenic carbon content in packaging	kg C	1.24	1.56	1.56	1.61	2.00	1.75

*Note: 1 kg biogenic carbon is equivalent to 44/12 kg CO<sub>2</sub>.*



## Additional information

Aware of the environmental problem generated by transporting more than 3,300 tons of material to the different works distributed around the world, and in order to reduce the carbon footprint that we generate, we began to delegate the purchase of glass and melanin panels in the hands of the distributors, so that they could do it in their respective places. Therefore, the purchase of these raw materials is made within a radius of 60 km from the location of the work. With this step we have managed to reduce by 80% the material that leaves the SITAB facilities, significantly reducing the emission of greenhouse gases but also requiring much fewer packaging materials for the dispatch of the different systems of the serie\_trebe.

Our efforts are not only focused on designing an environmentally sustainable product, we also take care of other aspects, such as manufacturing, looking for an electricity supplier capable of certifying that the energy used to manufacture the serie\_trebe comes from 100% renewable energy. Within this framework, we replace all SITAB lighting sources with low-consumption LED lighting, thus adopting constructive criteria for our facilities with a high degree of efficiency and sustainability.

Another aspect, which is important to highlight in the serie\_trebe, is its low maintenance. Following the four points of the "Maintenance and cleaning guide", the system may stay in perfect condition throughout its functional life, an estimated period of 12 - 15 years.

The serie\_trebe is re-installable and 100% recyclable.

## Information related to Sector EPD

This is not a sector EPD.

## Differences versus previous versions

This is the first version of this EPD.

## References

General Programme Instructions of the International EPD<sup>®</sup> System. Version 3.01.  
PCR 2019:14 Construction Products. Version 1.1.

